

980 GC Wheel Loader

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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Engine		
Engine Model	Cat® C13A	
Engine Power @ 1,700 rpm	313 kW	420 hp
ISO 14396		
ISO 14396 (DIN)	426 mhp (PS)	
Gross Power @ 1,700 rpm	317 kW	425 hp
SAE J1995		
Net Power @ 1,700 rpm	293 kW	393 hp
ISO 9249, SAE J1349		
ISO 9249 (DIN)	398 mhp (PS)	
Engine Torque (1,200 rpm)	2185 N·m	1,612 lbf-ft
ISO 14396		
Gross Torque (1,200 rpm)	2206 N·m	1,627 lbf-ft
SAE J1995		
Net Torque (1,100 rpm)	2086 N·m	1,539 lbf-ft
ISO 9249, SAE J1349,		
EEC 80/1269		
Bore	130 mm	5.12 in
Stroke	157 mm	6.18 in
Displacement	12.5 L	763 in ³

- Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, China Nonroad Stage IV and Japan 2014 emission standards.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible* with ULSD blended with the following lower-carbon intensity fuels** up to:
- 20% biodiesel FAME (fatty acid methyl ester)***
- 100% renewable diesel, HVO (hydrotreated vegetable oil and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

- * While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use.
- ** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.
- *** Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

Weights

Operating Weight 29 760 kg 65,610 lb

 Weight based on a machine configuration with standard ambient cooling, open differential axles, Maxam MS405 L4 tires, standard counterweight, full fluids, operator and 5.5 m³ (7.2 yd³) bucket with BOCE.

Operating Specifications		
Static Tipping Load Full 40° Turn		
With Tire Deflection	19 251 kg	42,441 lb
Without Tire Deflection	20 452 kg	45,089 lb
Breakout Force	212 kN	47,660 lbf

- For a machine configuration as defined under "Weight."
- Full compliance to ISO 14397-1:2007 Sections 1 through 6, which requires 2% verification between calculations and testing.

Bucket Capacities		
Bucket Range	4.3-5.8 m ³	5.75-7.5 yd ³
Transmission		
Forward 1	6.6 km/h	4.1 mph
Forward 2	12.7 km/h	7.9 mph
Forward 3	22.5 km/h	14.0 mph
Forward 4	39.8 km/h	24.7 mph
Reverse 1	7.6 km/h	4.7 mph
Reverse 2	14.5 km/h	9.0 mph
Reverse 3	25.7 km/h	16.0 mph
Reverse 4	39.8 km/h	24.7 mph

 Maximum travel speed in standard vehicle with empty bucket and standard L4 tires with 913 mm (36 in) roll radius.

Service Refill Capacities		
Fuel Tank Size	426 L	112.5 gal
Diesel Exhaust Fluid (DEF) Tank Size	21 L	5.6 gal
Cooling System	52 L	13.7 gal
Crankcase	37 L	9.8 gal
Transmission	77 L	20.3 gal
Differentials and Final Drives – Front	84 L	22.2 gal
Differentials and Final Drives – Rear	84 L	22.2 gal
Hydraulic Tank	153 L	40.4 gal

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction for identification of the gas.

- *If equipped with R134a (Global Warming Potential = 1430), the system contains 1.476 kg of refrigerant which has a $\rm CO_2$ equivalent 2.145 metric tonnes (2.365 tons).
- *If equipped with R1234yf (Global Warning Potential = .501) the system contains 1.476 kg of refrigerant which has a CO₂ equivalent of .001 metric tonnes.

Hydraulic System	
Implement System Pump Type	Variable displacement piston, load sensing
Implement System	
Maximum Flow @ 2,250 rpm	415 L/min 110 gal/min
Maximum Operating Pressure	28 200 kPa 4,090 psi
Maximum Flow 3rd Function	250 L/min 66 psi
Maximum Operating Pressure 3rd Function	28 680 kPa 3,000 psi
Hydraulic Cycle Time	
Raise from Carry Position	5.3 seconds
Dump at Maximum Raise	1.7 seconds
Lower, Empty, Float Down	3.1 seconds
Total Cycle Time	10.1 seconds

'es*

Choices include:

Triangle 29.5R25★★ L3 (TB598)

Triangle 29.5-25 28PR L3 (TL612)

Triangle 29.5R25★★ L4 (TB598S)

Triangle 26.5R25★★ L5 (TB598S+)

Maxam 29.5R25★★ L3 (MS302)

Maxam 29.5R25★★ L4 (MS405 DUMPXTRA)

Maxam 29.5R25★★ L5 (MS503)

Bridgestone 29.5R25★ L3 (VJT)

Bridgestone 29.5-25 28PR L3 (VL2)

Bridgestone 29.5R25 ★/★★ L4 (VSNT)

Bridgestone 29.5-25★ L5 (VSDT)

Sound	
Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	112 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)**

^{*}Including countries that adopt the EU and UK directives.

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^{**}EU Noise Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701.

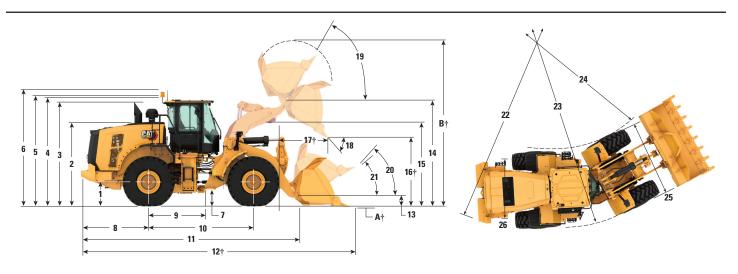
Brake	s	
		ISO 3449:2005 Level II standards
Falling o	bject protective structure (FOPS)	ISO 3471:2008 and
Rollover	protective structure (ROPS)/	ROPS/FOPS meet

Brakes Brakes meet
ISO 3450:2011 standards

^{*}Tire offerings vary by region. Consult your local Cat dealer for further details.

Dimensions

All dimensions are approximate and based on Maxam MS405S L4 radial tires.



1 Height to Axle Centerline	862 mm	2'8"
2 Height to Top of Hood	3042 mm	9'10"
3 Height to Top of Exhaust Pipe	3742 mm	12'3"
4 Height to Top of ROPS	3807 mm	12'5"
5 Height to Top of Product Link Antenna	3813 mm	12'5"
6 Height to Top of Warning Beacon	4086 mm	13'4"
7 Ground Clearance	434 mm	1'4"
8 Center Line of Rear Axle to Edge of Counterv	veight 2606 mm	8'5"
9 Center Line of Rear Axle to Hitch	1900 mm	6'2"
10 Wheelbase	3800 mm	12'5"
11 Overall Length (without Bucket)	8093 mm	26'6"
12 Shipping Length (with Bucket level on ground	1)*† 9685 mm	31'8"
13 Hinge Pin Height at Carry Height	642 mm	2'1"
14 Hinge Pin Height at Maximum Lift	4532 mm	14'9"
15 Lift Arm Clearance at Maximum Lift	3843 mm	12'6"
16 Dump Clearance at Maximum Lift and 45° Di	scharge*† 3199 mm	10'5"
17 Reach at Maximum Lift and 45° Discharge*†	1494 mm	4'9"
18 Dump Angle at Maximum Lift & Dump (on st	tops)*	52°
19 Rack Back at Maximum Lift*		61°
20 Rack Back at Carry Height*		49°
21 Rack Back at Ground*		41°
22 Clearance Circle (dia) to Counterweight	13 459 mm	44'2"
23 Clearance Circle (dia) to Outside of Tires	13 503 mm	44'3"
24 Clearance Circle (dia) to Inside of Tires	7377 mm	24'2"
25 Width Over Tires (unloaded)	2819 mm	9'2"
Width Over Tires (loaded)	2837 mm	9'3"
26 Tread Width	2230 mm	7'3"

^{*}With 5.5 m³ (7.25 yd³) general purpose pin-on bucket with BOCE (see Operating Specifications for other Buckets).

 $[\]dagger Dimensions$ are listed in Operating Specifications charts.

All height and tire related dimensions are with Maxam MS405S L4 radial tires (see Tire Option Chart for other tires). "Width Over Tires" dimensions are over the bulge and include growth.

Tire Options

Tire Brand	Triangle	Triangle	Triangle	Triangle	Maxam
Tire Size	29.5R25	29.5-25	29.5R25	29.5R25	29.5R25
Tread Type	L-3	L-3	L-4	L-5	L-3
Tread Pattern	TB598	TL612	TB598S	TB538S+	MS302
Width over Tires – Maximum (empty)*	3037 mm 9'10"	2807 mm 9'2"	2817 mm 9'2"	3045 mm 9'10"	3054 mm 10'0"
Width over Tires – Maximum (loaded)*	3094 mm 10'2"	2836 mm 9'3"	3074 mm 10'1"	3053 mm 10'0"	3079 mm 10'1"
Change in Vertical Dimensions		10 mm	11 mm	32 mm	-6 mm
(average of front and rear)		0.40"	0.43"	1.26"	-0.24"
Change in Horizontal Reach		-9.5 mm -0.38"	-6 mm -0.24"	-25.40 mm -1.0"	-19 mm -0.75"
Change in Clearance Circle to Outside of Tires		-129 mm -5.08"	-10 mm -0.40"	-20.50 mm -0.81"	-7.5 mm -0.30"
Change in Clearance Circle to Inside of Tires		129 mm 5.08"	10 mm 0.40"	20.5 mm 0.81"	8 mm 0.31"
Change in Operating Weight (without ballast)		-313 kg -690 lb	323 kg 712 lb	904 kg 1,993 lb	80 kg 176 lb
Change in Static Tipping Load – Straight		-238 kg -525 lb	245 kg 540 lb	687 kg 1,515 lb	61 kg 134 lb
Change in Static Tipping Load – Articulated		-208 kg -459 lb	215 kg 474 lb	601 kg 1,325 lb	53 kg 117 lb
Rear Axle Oscillation Angle	±13 degrees	±13 degrees	±13 degrees	±13 degrees	±13 degrees

NOTE: Tire offerings may vary by region. Consult your local Cat dealer for further details.

^{*}Width over tire bulge and includes tire growth.

Tire Brand	Maxam	Maxam	Bridgestone	Bridgestone	Bridgestone	Bridgestone
Tire Size	29.5R25	29.5R25	29.5R25	29.5-25	29.5R25	29.5R25
Tread Type	L–4	L-5	L-3	L–3	L-4	L-5
Tread Pattern	MS405 DUMPXTRA	MS503	VJT	VL2	VSNT	VSDT
Width over Tires – Maximum (empty)*	2819 mm	2819 mm	2835 mm	2782 mm	2818 mm	2818 mm
	9'2"	9'2"	9'3"	9'1"	9'2"	9'2"
Width over Tires – Maximum (loaded)*	2837 mm	3086 mm	3079 mm	3028 mm	2835 mm	2835 mm
	9'3"	10'1"	10'1"	9'9"	9'3"	9'3"
Change in Vertical Dimensions (average of front and rear)	-24 mm	7 mm	-4 mm	18 mm	24 mm	12 mm
	-0.94"	0.28"	-0.16"	0.71"	0.08"	0.47"
Change in Horizontal Reach	-6 mm	-27 mm	-4.5 mm	3 mm	-25 mm	-24.5 mm
	-0.24"	-1.06"	-0.18"	0.12"	-0.08"	-0.97"
Change in Clearance Circle to Outside of Tires	-128.5 mm	-4 mm	-7.5 mm	-33 mm	-129.5 mm	-129.5 mm
	-5.06"	-0.16"	-0.30"	-1.30"	-0.42"	-5.10"
Change in Clearance Circle to Inside of Tires	128.5 mm	4 mm	7.5 mm	33 mm	129.5 mm	129.5 mm
	5.06"	0.16"	0.30"	1.30"	0.42"	5.10"
Change in Operating Weight (without ballast)	220 kg	1108 kg	-76 kg	-236 kg	532 mm	1108 kg
	485 lb	2,443 lb	-168 lb	-520 lb	1'7"	2,443 lb
Change in Static Tipping Load – Straight	167 kg	842 kg	-58 kg	-179 kg	404 mm	842 kg
	368 lb	1,856 lb	-128 lb	-395 lb	1'3"	1,856 lb
Change in Static Tipping Load – Articulated	146 kg	737 kg	-51 kg	-157 kg	354 mm	737 kg
	322 lb	1,625 lb	-112 lb	-346 lb	1'2"	1,625 lb
Rear Axle Oscillation Angle	±13 degrees	±13 degrees	±13 degrees	±13 degrees	±13 degrees	±13 degrees

NOTE: Tire offerings may vary by region. Consult your local Cat dealer for further details.

^{*}Width over tire bulge and includes tire growth.

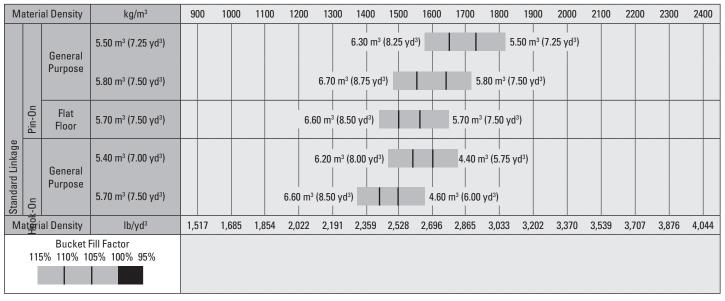
Bucket Fill Factors and Selection Guide

The bucket size must be chosen based on the density of the material and on the expected fill factor. The Cat Performance Series Buckets with longer floor, larger bucket opening, increased repository angle, rounded side boards and integrated spill guard demonstrate fill factors significantly higher than previous generation or non-Cat buckets. The actual volume handled by the machine is thus often larger than the rated capacity.

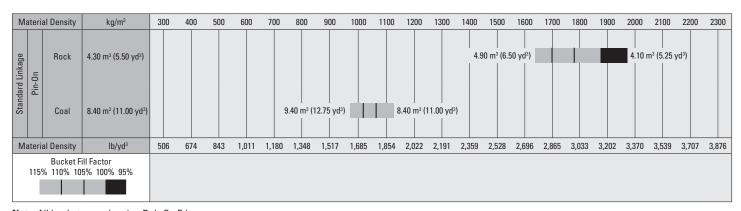
Loose Material		Fill Factor (%)*	Material Density
Earth/Clay		115	1.5-1.7
Sand and Gravel		115	1.5-1.7
Aggregate:	25-76 mm (1 to 3 in)	110	1.6-1.7
	19 mm (0.75 in) and smaller	105	1.8
Rock:	76 mm (3 in) and larger	100	1.6

^{*}As a % of ISO 7546:1983 rated capacity.

Note: Fill Factors achieved will also depend on whether the product is washed or not washed.



Note: All buckets are showing Bolt-On Edges.



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^{*}Bucket availability may vary by region.

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^{**} Data with Rock, Spade buckets equipped with Teeth and Segments and machine with L5 tires.

Operating Specifications – Buckets

Linkage		Standar	d Linkage		
Bucket Type			General Pur	pose – Pin-On	
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments
Capacity – Rated	m^3	5.50	5.50	5.80	5.80
	yd^3	7.25	7.25	7.50	7.50
Capacity - Rated at 110% Fill Factor	m^3	6.10	6.10	6.40	6.40
	yd^3	8.00	8.00	8.25	8.25
Width	mm	3468	3533	3468	3533
	ft/in	11'4"	11'7"	11'4"	11'7"
16† Dump Clearance at Maximum Lift	mm	3278	3105	3241	3069
and 45° Discharge	ft/in	10'9"	10'2"	10'7"	10'0"
17† Reach at Maximum Lift and	mm	1478	1636	1511	1670
45° Discharge	ft/in	4'10"	5'4"	4'11"	5'5"
Reach at Level Lift Arm and	mm	2961	3193	3011	3244
Bucket Level	ft/in	9'8"	10'5"	9'10"	10'7"
A† Digging Depth	mm	114	104	114	104
	in	4.4"	4"	4.4"	4"
12† Overall Length	mm	9615	9871	9665	9920
	ft/in	31'7"	32'5"	31'9"	32'7"
B † Overall Height with Bucket at	mm	6430	6430	6490	6490
Maximum Lift	ft/in	21'2"	21'2"	21'4"	21'4"
Loader Clearance Circle Radius	mm	7619	7724	7632	7737
with Bucket at Carry Position	ft/in	25'0"	25'5"	25'1"	25'5"
Static Tipping Load, Straight	kg	22 328	22 032	22 193	21 895
(With tire deflection)	lb	49,226	48,574	48,928	48,271
Static Tipping Load, Straight	kg	23 673	23 373	23 544	23 242
(No tire deflection)	lb	52,191	51,530	51,907	51,240
Static Tipping Load,	kg	19 322	19 025	19 192	18 894
Articulated (With tire deflection)	lb	42,598	41,945	42,312	41,654
Static Tipping Load, Articulated	kg	20 516	20 216	20 393	20 091
(No tire deflection)	lb	45,230	44,569	44,959	44,293
Breakout Force(§)	kN	217	214	209	207
	lbf	48,898	48,251	47,174	46,541
Operating Weight*	kg	29 425	29 643	29 501	29 719
	lb	64,871	65,351	65,038	65,519

^{*}Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Maxam MS405 L4 tires, standard counterweight, full fluids, operator and 5.5 m³ (7.2 yd³) bucket with BOCE.

^{**}Rock bucket specifications are given on Maxam 29.5R25 MS503 L5 Radial tires.

[†] Illustration shown with Dimension charts.

^(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

⁽With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

⁽No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Operating Specifications – Buckets

Linkage			Standar	d Linkage	
Bucket Type		General Purpose — Hook-On — Fusion™			
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments
Capacity – Rated	m^3	5.40	5.40	5.70	5.70
	yd ³	7.00	7.00	7.50	7.50
Capacity – Rated at 110% Fill Factor	m ³	5.90	5.90	6.30	6.30
	yd^3	7.75	7.75	8.25	8.25
Width	mm	3447	3546	3447	3447
	ft/in	11'3"	11'7"	11'3"	11'3"
16† Dump Clearance at Maximum Lift	mm	3163	3009	3096	2937
and 45° Discharge	ft/in	10'4"	9'10"	10'1"	9'7"
17† Reach at Maximum Lift and	mm	1608	1751	1652	1788
45° Discharge	ft/in	5'3"	5'8"	5'5"	5'10"
Reach at Level Lift Arm and	mm	3134	3343	3214	3421
Bucket Level	ft/in	10'3"	10'11"	10'6"	11'2"
A† Digging Depth	mm	118	123	118	118
	in	4.6"	4.8"	4.6"	4.6"
12† Overall Length	mm	9792	10 021	9873	10 103
	ft/in	32'2"	32'11"	32'5"	33'2"
B† Overall Height with Bucket at	mm	6505	6505	6573	6573
Maximum Lift	ft/in	21'5"	21'5"	21'7"	21'7"
Loader Clearance Circle Radius	mm	7697	7820	7723	7804
with Bucket at Carry Position	ft/in	25'4"	25'8"	25'5"	25'8"
Static Tipping Load, Straight	kg	20 528	20 265	20 333	20 177
(With tire deflection)	lb	45,256	44,677	44,826	44,483
Static Tipping Load, Straight	kg	21 824	21 558	21 634	21 476
(No tire deflection)	lb	48,114	47,528	47,695	47,348
Static Tipping Load,	kg	17 614	17 351	17 433	17 277
Articulated (With tire deflection)	lb	38,833	38,254	38,433	38,089
Static Tipping Load, Articulated	kg	18 767	18 501	18 591	18 434
(No tire deflection)	lb	41,375	40,789	40,987	40,640
Breakout Force(§)	kN	190	192	181	179
	lbf	42,872	43,285	40,713	40,283
Operating Weight*	kg	30 491	30 686	30 568	30 683
	lb	67,221	67,651	67,391	67,644

^{*} Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Maxam MS405 L4 tires, standard counterweight, full fluids, operator and 5.5 m³ (7.2 yd³) bucket with BOCE.

^{**}Rock bucket specifications are given on Maxam 29.5R25 MS503 L5 Radial tires.

[†] Illustration shown with Dimension charts.

^(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

⁽With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

⁽No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Operating Specifications – Buckets

Linkage	age Standard Linkage		Linkage
Bucket Type		General Purpose – Pin-On – Abrasion	
Edge Type		Bolt-On Cutting Edges	Teeth and Segments
Capacity – Rated	m³	5.70	5.70
	yd³	7.50	7.50
Capacity - Rated at 110% Fill Factor	m^3	6.30	6.30
	yd^3	8.25	8.25
Width	mm	3481	3546
	ft/in	11'5"	11'7"
16 † Dump Clearance at Maximum Lift	mm	3201	3046
and 45° Discharge	ft/in	10'6"	9'11"
17† Reach at Maximum Lift and	mm	1552	1693
45° Discharge	ft/in	5'1"	5'6"
Reach at Level Lift Arm and	mm	3069	3277
Bucket Level	ft/in	10'0"	10'9"
A† Digging Depth	mm	114	119
	in	4.4"	4.6"
12† Overall Length	mm	9723	9951
	ft/in	31'11"	32'8"
B † Overall Height with Bucket at	mm	6432	6432
Maximum Lift	ft/in	21'2"	21'2"
Loader Clearance Circle Radius	mm	7654	7751
with Bucket at Carry Position	ft/in	25'2"	25'6"
Static Tipping Load, Straight	kg	21 363	21 252
(With tire deflection)	1b	47,097	46,854
Static Tipping Load, Straight	kg	22 688	22 577
(No tire deflection)	1b	50,020	49,774
Static Tipping Load,	kg	18 376	18 266
Articulated (With tire deflection)	lb	40,514	40,271
Static Tipping Load, Articulated	kg	19 553	19 442
(No tire deflection)	lb	43,108	42,863
Breakout Force(§)	kN	198	202
	lbf	44,706	45,478
Operating Weight*	kg	30 100	30 177
-	lb	66,359	66,529

^{*} Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Maxam MS405 L4 tires, standard counterweight, full fluids, operator and 5.5 m³ (7.2 yd³) bucket with BOCE.

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[†] Illustration shown with Dimension charts.

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Operating Specifications – Buckets

Linkage	Standard Linkage					
Bucket Type		Flat Floor	– Pin-On	Flat Floor – Pin-On – Light Material (Coal)	Flat Floor – Pin-On Abrasion (FMT)	
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Tips	
Capacity – Rated	m ³	5.70	5.70	8.40	5.60	
	yd^3	7.50	7.50	11.00	7.25	
Capacity – Rated at 110% Fill Factor	m ³	6.30	6.30	9.20	6.20	
	yd^3	8.25	8.25	12.00	8.00	
Width	mm	3481	3546	3638	3600	
	ft/in	11'5"	11'7"	11'11"	11'9"	
6† Dump Clearance at Maximum Lift	mm	3096	2930	2915	2943	
and 45° Discharge	ft/in	10'1"	9'7"	9'6"	9'7"	
7† Reach at Maximum Lift and	mm	1459	1588	1647	1648	
45° Discharge	ft/in	4'9"	5'2"	5'4"	5'4"	
Reach at Level Lift Arm and	mm	3093	3302	3354	3335	
Bucket Level	ft/in	10'1"	10'10"	11'0"	10'11"	
A† Digging Depth	mm	114	119	109	79	
	in	4.4"	4.6"	4.2"	3.1"	
2† Overall Length	mm	9747	9976	10 004	9970	
	ft/in	32'0"	32'9"	32'10"	32'9"	
B† Overall Height with Bucket at	mm	6473	6473	6761	6473	
Maximum Lift	ft/in	21'3"	21'3"	22'3"	21'3"	
Loader Clearance Circle Radius	mm	7661	7758	7804	7773	
with Bucket at Carry Position	ft/in	25'2"	25'6"	25'8"	25'7"	
Static Tipping Load, Straight	kg	21 197	21 013	21 071	20 491	
(With tire deflection)	lb	46,732	46,327	46,455	45,176	
Static Tipping Load, Straight	kg	22 492	22 306	22 464	21 787	
(No tire deflection)	lb	49,586	49,176	49,524	48,033	
Static Tipping Load,	kg	18 261	18 077	18 100	17 535	
Articulated (With tire deflection)	lb	40,258	39,852	39,905	38,658	
Static Tipping Load, Articulated	kg	19 410	19 224	19 344	18 684	
(No tire deflection)	lb	42,793	42,383	42,646	41,191	
Breakout Force(§)	kN	196	199	166	208	
	lbf	44,218	44,817	37,511	46,770	
Operating Weight*	kg	29 962	30 095	30 222	30 769	
	lb	66,055	66,348	66,628	67,833	

^{*}Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Maxam MS405 L4 tires, standard counterweight, full fluids, operator and 5.5 m³ (7.2 yd³) bucket with BOCE.

^{**}Rock bucket specifications are given on Maxam 29.5R25 MS503 L5 Radial tires.

[†] Illustration shown with Dimension charts.

^(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

⁽With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

⁽No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

Operating Specifications – Buckets

Linkage		Standard Linkage	
Bucket Type		Rock, Spade** – Pin-On	
Edge Type		Teeth and Segments	
Capacity – Rated	m^3 yd^3	4.30 5.50	
Capacity – Rated at 110% Fill Factor	$\frac{yu}{m^3}$	4.70	
Capacity Rated at 1107011111 actor	yd^3	6.25	
Width	mm	3525	
77 1441	ft/in	11'6"	
16 † Dump Clearance at Maximum Lift	mm	3111	
and 45° Discharge	ft/in	10'2"	
17† Reach at Maximum Lift and	mm	1767	
45° Discharge	ft/in	5'9"	
Reach at Level Lift Arm and	mm	3278	
Bucket Level	ft/in	10'9"	
A† Digging Depth	mm	109	
1 38 8 °F	in	4.2"	
12† Overall Length	mm	9957	
	ft/in	32'8"	
B † Overall Height with Bucket at	mm	6147	
Maximum Lift	ft/in	20'2"	
Loader Clearance Circle Radius	mm	7744	
with Bucket at Carry Position	ft/in	25'5"	
Static Tipping Load, Straight	kg	22 003	
(With tire deflection)	lb	48,509	
Static Tipping Load, Straight	kg	23 318	
(No tire deflection)	lb	51,408	
Static Tipping Load,	kg	18 956	
Articulated (With tire deflection)	lb	41,792	
Static Tipping Load, Articulated	kg	20 119	
(No tire deflection)	lb	44,354	
Breakout Force (§)	kN	201	
	lbf	45,317	
Operating Weight*	kg	29 944	
	lb	66,014	

^{*} Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Maxam MS405 L4 tires, standard counterweight, full fluids, operator and 5.5 m³ (7.2 yd³) bucket with BOCE.

^{**}Rock bucket specifications are given on Maxam 29.5R25 MS503 L5 Radial tires.

[†] Illustration shown with Dimension charts.

^(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

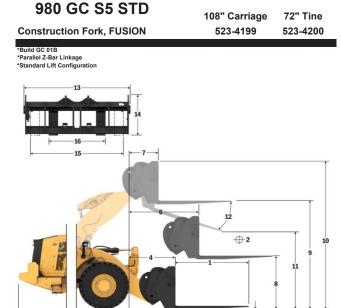
⁽With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

⁽No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Fork Specifications

Fork Specifica	tions
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	n opcomouno		
1	Tine Length	mm in	1829 72.0
2	Load Center	mm	914
	Load Center	in	36.0
	Static Tipping Load - Straight (Forks Level)	kg	14399
		lbs ka	31736 12474
	Static Tipping Load - Articulated (Forks Level)	lbs	27493
	Rated Load (SAE J1197 - 50% FTSTL)	kg	6237
	Nated Load (SAL 91191 - 30 /01 131L)	lbs	13747
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg	7485
		lbs ka	16496 8364
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	lbs	18435
3	Maximum Overall Length	mm	10365
3	Maximum Overali Lerigin	in	408.1
4	Reach with Forks at Ground Level	mm	1196
		in	47.1
5	*Ground to Bottom of Tine at Minimum Height and Fork Level	mm in	-120 -4.7
_		mm	1815
6	Reach with Arms Horizontal and Forks Level	in	71.4
7	Reach with Fork at Maximum Height	mm	888
'	Treach with Fork at Maximum Fleight	in	35.0
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm	2075 81.7
_		in mm	4343
9	Ground to Top of Tine at Maximum Height and Fork Level	in	171.0
10	Overall Height of Fork at Full Lift (top of carriage to ground)	mm	5387
10	Overall Fleight of Fork at Full Lift (top of carriage to ground)	in	212.1
11	Clearance at Full Lift and Max Dump	mm	2477
	· · · · · · · · · · · · · · · · · · ·	in	97.5
12	Max Discharge Angle from Horizontal	deg	55
13	Overall Carriage Width	mm	2821
13	Overall Carriage Width	in	111.1
14	Overall Carriage Height	mm	1129
		in mm	44.4 2627
15	Outside Tine Width (max spread)	in	103.4
40	Outside Tine Width (min spread)	mm	747
10	Outside Title Width (Milit Spread)	in	29.4
	Tine Width (single tine)	mm	250.0
		in	9.8
	Tine Thickness	mm in	85.0 3.3
	T 0 1	ka	18700
	Tine Capacity	lbs	41215
	Operating Weight	kg	29329
	Operating Weight	lbs	64641
	*Negative values indicate below grade		



Hinge (B) Pin Height (mm)

Capacity (kg) (Calculated Load at CG Point)



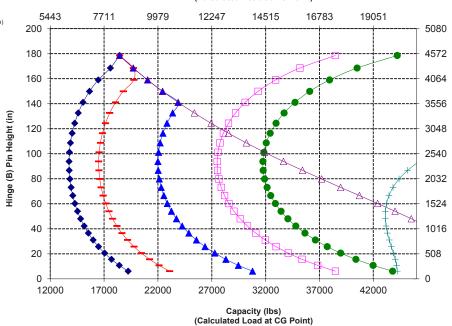
- Payload (CEN EN 474-3 Rough Terrain) → Payload (CEN EN 474-3 - Firm & Level)
- -Static Tipping Load Articulated
- -Static Tipping Load Straight
- Hydraulic Tilt Capacity +Hydraulic Lift Capacity

NOTE: Static tipping loads and operating weight are based on the following loader configuration: MAXAM MS405 DX L4 Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants and Operator.

the following standards: SAE* J1197, ISO 14397-1, CEN** EN 474-3.

The rated operating load for a loader equipped with a pallet fork is determined by:
SAE J1197: 50% of full turn static tipping load or hydraulic limit.
CEN EN 474-3: 60% of full turn static tipping load or prough terrain CEN EN 4/4-3: 0.0% of full turn static tipping load on rough terrain or hydraulic limit.
CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit.

*SAE - Society of Automotive Engineers
**CEN - European Committee for Standardization



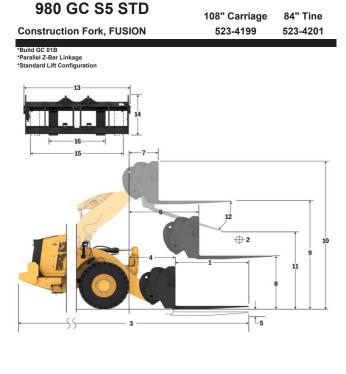
NOTICE: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

^{*}Negative values indicate below grade

Fork Specifications

Fork S	pecifications
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гυ	rk Specifications		
1	Tine Length	mm	2134
_		in mm	84.0 1067
2	Load Center	in	42.0
	Static Tipping Load - Straight (Forks Level)	kg	13723
		lbs ka	30245 11874
	Static Tipping Load - Articulated (Forks Level)	lbs	26171
	Rated Load (SAE J1197 - 50% FTSTL)	kg	5937
	Nated Load (OAL 31197 - 30 /61 101L)	lbs	13085
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg lbs	7125 15702
	Detect and (OEN EN 474 2 Firm and Lavel Convey 200/ ETOTI)	ka	7426
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	lbs	16367
3	Maximum Overall Length	mm	10673
		in mm	420.2 1199
4	Reach with Forks at Ground Level	in	47.2
5	*Ground to Bottom of Tine at Minimum Height and Fork Level	mm	-120
,	Ground to Bottom of Time at Milliman Freignt and Fork Level	in	-4.7
6	Reach with Arms Horizontal and Forks Level	mm in	1815 71.4
-	Desch with Fest at Manteum Height	mm	888
7	Reach with Fork at Maximum Height	in	35.0
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm	2080
	<u> </u>	in mm	81.9 4348
9	Ground to Top of Tine at Maximum Height and Fork Level	in	171.2
10	Overall Height of Fork at Full Lift (top of carriage to ground)	mm	5387
10	Overall Fleight of Fork at Full Lift (top of carriage to ground)	in	212.1
11	Clearance at Full Lift and Max Dump	mm in	2227 87.7
	M 5: 1 A 1 C 11: 11		
12	Max Discharge Angle from Horizontal	deg	55
13	Overall Carriage Width	mm	2821
		in mm	111.1 1129
14	Overall Carriage Height	in	44.4
15	Outside Tine Width (max spread)	mm	2627
	Outside Time Width (Max Spread)	in	103.4 747
16	Outside Tine Width (min spread)	mm in	29.4
	Ti \A/: 445 /-:1- 4:>	mm	250.0
	Tine Width (single tine)	in	9.8
	Tine Thickness	mm	90.0
		in ka	3.5 17729
	Tine Capacity	lbs	39075
	Operating Weight	kg	29431
	Operating weight	lbs	64866
	*Negative values indicate below grade		





- -Static Tipping Load Articulated
- Static Tipping Load Straight - Hydraulic Tilt Capacity
- +Hydraulic Lift Capacity

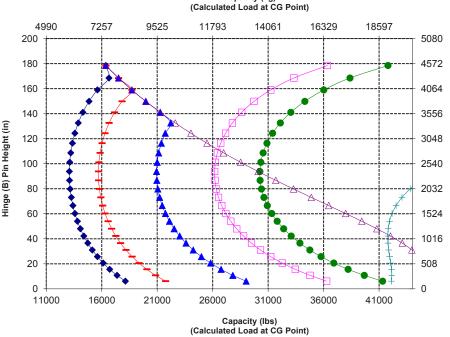
NOTE: Static tipping loads and operating weight are based on the following loader configuration: MAXAM MS405 DX L4 Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator.

Specifications and ratings conform to the following standards: SAE* J1197, ISO 14397-1, CEN** EN 474-3.

The rated operating load for a loader equipped with a pallet fork is determined by:
SAE J1197: 50% of full turn static
tipping load or hydraulic limit.
CEN EN 474-3: 60% of full turn static tipping load on rough terrain or hydraulic limit. CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or

hydraulic limit.

*SAE - Society of Automotive Engineers
**CEN - European Committee for



Capacity (kg)

NOTICE: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

(B) Pin Height (mm)

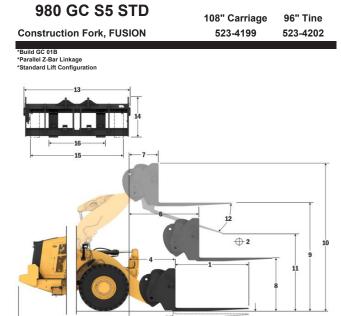
Hinge (

^{*}Negative values indicate below grade

Fork Specifications

Fork Specificat	tions
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10	ik Specifications		
1	Tine Length	mm	2438
_		in mm	96.0 1219
2	Load Center	in	48.0
	Static Tipping Load - Straight (Forks Level)	kg	13038
	State ripping 2000 Statistic (1 Sine 2010)	lbs	28736
	Static Tipping Load - Articulated (Forks Level)	ka Ibs	11261 24819
	D. III. LOAF HART FOR FTOTIL	kg	5631
	Rated Load (SAE J1197 - 50% FTSTL)	lbs	12410
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg	6597
	Tatou 2000 (OZIT ZIT II TO TROUGH TOHUM OO701 TOTZ)	lbs	14540
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	kg lbs	6597 14540
		mm	10982
3	Maximum Overall Length	in	432.4
4	Reach with Forks at Ground Level	mm	1203
	Trought man Forme at Ground 2010.	in	47.4
5	*Ground to Bottom of Tine at Minimum Height and Fork Level	mm in	-118 -4.6
_		mm	1820
6	Reach with Arms Horizontal and Forks Level	in	71.6
7	Reach with Fork at Maximum Height	mm	893
	Treath with third at waximan rieight	in	35.2
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm in	2081 81.9
_		mm	4350
9	Ground to Top of Tine at Maximum Height and Fork Level	in	171.3
10	Overall Height of Fork at Full Lift (top of carriage to ground)	mm	5387
	overall rieight of ronk at rail Elit (top of carriage to ground)	in	212.1
11	Clearance at Full Lift and Max Dump	mm in	1973 77.7
12	Max Discharge Angle from Horizontal	deg	55
13	Overall Carriage Width	mm	2821
	Overland Carriage Vitable	in	111.1
14	Overall Carriage Height	mm in	1127 44.4
	O LILE MONEY	mm	2629
15	Outside Tine Width (max spread)	in	103.5
16	Outside Tine Width (min spread)	mm	747
		in	29.4
	Tine Width (single tine)	mm in	250.0 9.8
	Tip - Thistones	mm	90.0
	Tine Thickness	in	3.5
	Tine Capacity	kq	15750
	This capacity	lbs	34713
	Operating Weight	kg lbs	29582 65199
		IDS	00199



Hinge (B) Pin Height (mm)

Capacity (kg) (Calculated Load at CG Point)



- -Static Tipping Load Straight
- +Hydraulic Lift Capacity

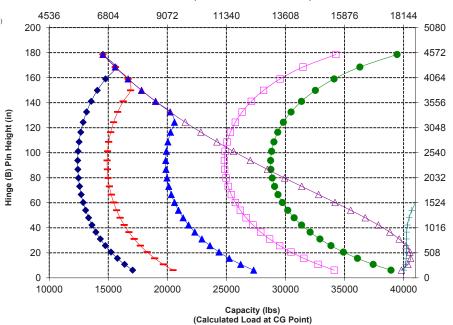
→Payload (SAE J1197)

NOTE: Static tipping loads and operating weight are based on the following loader configuration: MAXAM MS405 DX L4 Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator

Specifications and ratings conform to the following standards: SAE* J1197, ISO 14397-1, CEN** EN 474-3.

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CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit.

*SAE - Society of Automotive Engineers **CEN - European Committee for Standardization



NOTICE: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

^{*}Negative values indicate below grade

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat® dealer for details.

	Standard	Optional
OPERATOR ENVIRONMENT		
Air conditioning (HVAC) with 10 vents and filter unit located outside of cab	✓	
Bucket/work tool function lockout	✓	
Cab, pressurized and sound suppressed	✓	
Camera, rearview	✓	
CB radio ready	✓	
Computerized monitoring system	✓	
Mirrors, rearview external	✓	
Pilot hydraulic controls, lift and tilt function; two (2) single axis levers or joystick	✓	
12V power port (10A)	✓	
Radio ready	✓	
Radio: DAB+/AM/FM/BT		✓
Rollover protective structure/falling objects protective structure (ROPS/FOPS)	✓	
Seat, Cat® Comfort (cloth), mechanical suspension	✓	
Seat, high-back, air suspended		✓
Seat, air suspended, heated		✓
Steering column, adjustable angle	✓	
Steering, dual mode		✓
Steering, secondary, electrical*		✓
Switch, transmission neutralizer (adjustable) lockout	✓	
Window, sliding (left and right sides)	✓	
Wipers/washers (front and rear)	✓	
POWERTRAIN		
Axles, Open/Open differentials	✓	
Axles, limited slip differential(s)		✓
Axles, oil cooler		✓
Brakes, full hydraulic enclosed wet-disc	✓	
Cat C13A engine	✓	
Engine Idle Management System (EIMS)	✓	
Auto Idle Shutdown (AIS)	✓	
Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand	✓	
Fan, reversing automatic and manual control		✓
Filter, fuel primary/secondary	✓	·
Fuel priming pump (electric)	✓	
Fuel/water separator	✓	
Radiator, unit core (9 fpi) with ATAAC	✓	
Torque converter	✓	
Transmission, powershift (4F/4R), automatic (2-4) with kick-down 2-1 manual	✓	
LINKAGE		
Quick coupler control		✓
Lift and bucket return-to-dig kickouts (electro-magnetic), mechanical adjustment	✓	
Z-bar, cast tilt lever	✓	

	Standard	Optional
HYDRAULICS		·
Dedicated brake and fan pump	✓	
Dedicated load sensing steering pump	✓	
Load sensing implement system pilot operated	✓	
Ride control		✓
S·O·S SM oil sampling valves	✓	
3 rd function with additional dedicated		✓
single axis lever		
ELECTRICAL		
Alarm, back-up variable	✓	
Alternator (115-amp, brush type)	✓	
Batteries, maintenance free (2×1,400 CCA)	✓	
Ignition key; start/stop	✓	
Lighting system: 4 halogen work lights,	✓	
cab mounted		
Lighting system: 8 halogen work lights,		✓
cab mounted		
Lighting system: 4 or 8 LED work lights, cab		./
mounted		•
Lights: LED taillights	✓	
Lights: warning beacon		✓
Main disconnect switch	✓	
Roading lights with high/low beam and F and R	✓	
turn signals		
Starter, electric (heavy duty)	✓	
Starting and charging system, 24V	✓	
ADDITIONAL EQUIPMENT		
Autolube system		✓
Camera, front view		✓
Cat Payload**		✓
Cat Payload for Trade***		✓
Cold weather starting		✓
Fender rear extensions or roading		✓
Hood, engine enclosure tilting	\checkmark	
L5 traction tires		✓
L3 radial or bias ply tires	✓	
Powertrain guard		✓
Precleaner, strata tubes with screen		✓
Product Link™ ready	✓	
Reverse Strobes		✓
Steering cylinder guard		✓
Tilt cylinder guard		✓
Toolbox		✓
Variable backup alarm (3dB above ambient noise)	✓	
Windshield guard		✓

^{*} Standard where mandated.

^{**} Not legal for trade.

^{***} Available in Europe. Country certifications vary. Contact your Cat dealer for more information.

980 GC Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

Engine

- Cat® engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, China Nonroad Stage IV and Japan 2014 emission standards.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible* with ULSD blended with the following lower-carbon intensity fuels** up to:
- 20% biodiesel FAME (fatty acid methyl ester)***
- 100% renewable diesel, HVO (hydrotreated vegetable oil and GTL (gas-to- liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

- * While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use.
- ** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.
- *** Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a. See the label or instruction manual for identification of the gas.
- *If equipped with R134a (Global Warming Potential = 1430), the system contains 1.476 kg of refrigerant which has a CO_2 equivalent 2.145 metric tonnes (2.365 tons).
- *If equipped with R1234yf (Global Warning Potential = .501) the system contains 1.476 kg of refrigerant which has a $\rm CO_2$ equivalent of .001 metric tonnes.

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- $\, Cadmium \leq 0.01\%$
- Chromium < 0.01%
- Lead < 0.01%

Sound

Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	112 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)**

- *Including countries that adopt the EU and UK directives.
- **EU Noise Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
- Engine Idle Management System and Auto Engine Idle Shutdown reduces idle RPM and maximizes fuel efficiency
- Variable speed fan adjusts to meet machine cooling requirements to help save fuel
- Load-sensing hydraulics produce flow and pressure on-demand and only in amounts necessary to perform the needed functions

Recycling

 The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage
Steel	65.74%
Iron	14.60%
Nonferrous Metal	1.28%
Mixed Metal	0.41%
Mixed-Metal and Nonmetal	0.67%
Plastic	1.10%
Rubber	11.13%
Mixed Nonmetallic	0.00%
Fluid	2.55%
Other	2.10%
Uncategorized	0.43%
Total	100%

A machine with higher recyclability rate will ensure more efficient
usage of valuable natural resources and enhance End-of-Life value
of the product. According to ISO 16714 (Earthmoving machinery –
Recyclability and recoverability – Terminology and calculation method),
recyclability rate is defined as percentage by mass (mass fraction in
percent) of the new machine potentially able to be recycled, reused, or
both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following value in the table may vary.

Recyclability – 96%



For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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AEXQ4386-00 (06-2025) Build number: 01B (N Am, Europe, Japan, China, S Korea, Türkiye, Chile, Colombia)

